

## **REMARKS CONCERNING THE AMENDMENTS**

The above amendments have been made in an effort to improve the quality of the claims. Antecedent basis for the amendments may be found generally in the specification and, for example:

Providing “images” – page 1, lines 16-32; page 20, lines 2-14; and page 27, lines 1-9.

“Computationally” estimating – Extensively on pages 21-26; original claim 1 (paragraph c); pages 3, 4, 7, 8 and 13.

### **CONFIRMATION OF ELECTION**

Applicant confirms the election of claims 1-34 for prosecution on the merits in response to the restriction requirement. That election is now without traverse.

Upon allowance of claims 1-34, and newly added claim 38, the Examiner is authorized to cancel the non-elected claims by Examiner's amendment.

## **RESPONSE TO THE OFFICE ACTION – ARGUMENTS**

1. Claims 1-3 have been rejected under 35 USC 101 as non-statutory subject matter.

This rejection would have been traversed without amendment, but the amendment to the claim further clarifies the statutory nature of the claimed subject matter. As long as claim does not claim only an algorithm, but claims the use of an algorithm with a physical step (e.g., altering data with an algorithm and using that data) or in a physical article (e.g., in a program in a computer), algorithms may be part of the limitations used within a claim. Neither the original claims nor the amended claims attempted to claim only an algorithm. Rather, those claims did and do now cover the use of an algorithm in a physical process. This rejection is in error and must be removed.

2. Claim 1 was objected to because of the informality in the spelling of “Computatiing.”

This objection has been rendered moot by the correction of that spelling.

3. Claims 1-34 have been rejected under 35 USC 102(e) as anticipated by Kucharczyk et al. (U.S. Patent No. 6,061,587)

This rejection is respectfully traversed. It must be noted that even though Kucharczyk provides images of MRI data, there is no disclosure of any computational use of that data, or manipulation of that data by procedures described in the present specification, and combinations of computational performances to produce images with specific objectives as described in the technology of the present application.

The Applicant has reviewed the Kucharczyk et al. text, the claims against which that text has been cited, and the citations of that text made in the Office Action

against the claims. It is felt that the assertion that Kucharczyk teaches these limitations of the claims is inaccurate. Kucharczyk teaches viewing of the data in real time, but teaches only visually estimation of the raw image. There is no computational modification/treatment of the data for specific purposes.

For example, a region of the Kucharczyk et al. disclosure that has been cited by the rejection is on column 11, lines 13-54. The use of images from times T1 and T2 and their relating is no more than direct visualization of the two images. If the observed optical properties (e.g., color or optical density) have changed, then the density of a material is imputed to have changed. This visual observation has no substantive equivalence to:

“...for supplying a unified suite of quantification functionality for density functions defined in a three-dimensional space including two or more of the services...”

which is recited in claim 1, and therefore every claim dependent therefrom.

Kucharczyk et al. nowhere teach supplying any unified suites, there is no literal description of including two or more services (as defined) in the supplying of a unified suite. Kucharczyk et al. teaches direct observation of the raw images produced by the MRI system and its attendant or included imaging software, none of which is shown or described as supplying unified suites, or providing unified suites from combinations of specific services. The rejection cannot be sustained under 35 U.S.C. 102(e) and must be withdrawn.

Please note that there are many dependent claims that clearly describe additional subject matter further limiting earlier claims that is also outside the teachings of the specification of Kucharczyk et al. For example:

Each and every mathematic procedure recited in claims 11-19.

Claim 30. (ORIGINAL) The method of claim 29 wherein said density is obtained by simulation of the transport and action of said molecules, cells or devices.

Claim 34. (ORIGINAL) The method of claim 1 wherein said density is a mathematical construct convenient in defining three-dimensional shapes for the purposes of computer-aided design.

The total absence of these limitations and recitations in the disclosure of Kucharczyk et al. renders this rejection untenable. All rejections must be withdrawn.

## CONCLUSION

The rejections and objections of record have been removed by amendment and/or were in error in their original presentation. The rejections should be withdrawn and all claims allowed.

If the Examiner believes that a telephone interview with the attorney of record can advance the prosecution of this application, the Examiner is respectfully requested to call the attorney of record, Mark A. Litman, at **952.832.9090**.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to MAIL STOP: AMENDMENT; Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on June 15, 2004.

Mark A. Litman  
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